GRUMMAN
plane news

Vol. 32, No. 19, Bethpage, N. Y., October 26, 1973

United Fund Short of Goal At Grumman

The United Fund of Long Island needs money. But with the cost of living spiraling to new record highs and inflation putting its sting in hitherto untouched niches, contributions this year are only trickling in.

At Grumman, the drive has been in progress for more than a month and as of Friday, Oct. 19, only 158 new contributors had signed up. Still, the company is a long way from exceeding last year's total when Grumman employees contributed $450,000 or 28 per cent of the $1.6 million collected from all employees on Long Island.

But there's a hard core within Grumman which is remaining optimistic. Dan Knowles, director of personnel who is heading the company's campaign this year, says he thinks the Grumman employees will rally to the United Fund's needs and ultimately "top last year's contributions." Knowles is making a plea to every employee to consider what the United Fund does, what its broad and worthwhile aims can do for Long Island and what individual employees can do to help.

Knowles says he has both a company and a personal commitment to the United Fund. While many employees may have to sacrifice some this year to help the United Fund, Knowles says he feels the Fund is one thing which makes personal sacrifice worthwhile. In fact, he adds, his own conviction is so strong that he would personally like to thank every employee who contributes, no matter how large or how small the contribution may be.

"We're not only hoping to bring in more money for the Fund than last year," Knowles says, "we are also aiming for more contributors than we had last year. For example, last year 6.6 per cent of our employees contributed $220,000 or nearly half of all the money through 'fair share' contributions. Another 38½ per cent of the employees contributed $230,000, either through payroll deductions or cash contributions. Fifty-five per cent of the employees at Grumman contributed nothing. This year, our goal is to try to get at least two-thirds to 80 per cent of our employees to make contributions."

To make contributing as easy and convenient as possible, the United Fund committee this year has made some alterations to the format. "This year, as in the past, we have distributed payroll deduction cards to employees for their use and convenience," Knowles explains. "Last year, the emphasis was on the 'fair share' concept by which an employee's contribution is based on a percentage of his

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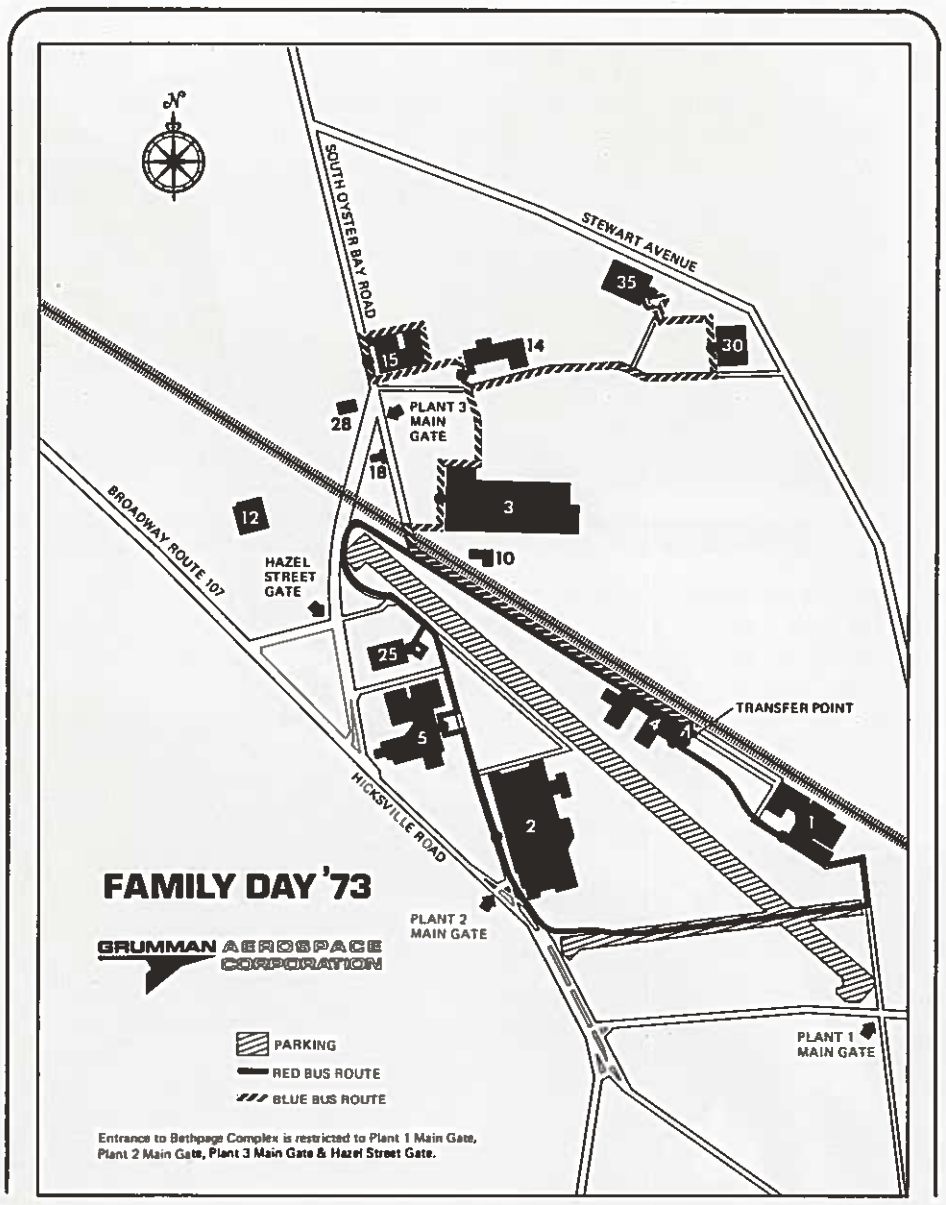
Roll 'em out. Line-up of trucks ready for delivery to customer represent part of daily production at the Sturgis, Mich., plant—Grumman Allied's largest facility. In the 10 years since its origin, the Sturgis plant has grown in production from 400 to over 4,000 trucks a year. For story, see page 5. (Photos by Bob Settles)


SOUTH OYSTER BAY ROAD
STEWART AVENUE
BROADWAY ROUTE 107
HAZEL STREET GATE
PLANT 3 MAIN GATE
HICKSVILLE ROAD
PLANT 2 MAIN GATE
PLANT 1 MAIN GATE
TRANSFER POINT
FAMILY DAY '73
GRUMMAN AEROSPACE CORPORATION
PARKING
RED BUS ROUTE
BLUE BUS ROUTE
Entrance to Bethpage Complex is restricted to Plant 1 Main Gate, Plant 2 Main Gate, Plant 3 Main Gate & Hazel Street Gate.

GATES OPEN AT 9 A.M., OCTOBER 28 FOR AEROSPACE'S FAMILY DAY

Gates will open at 9 a.m. this Sunday—rain or shine—for 50,000 employees and their families who are expected to attend Grumman Aerospace's Family Day at the Bethpage facilities.

There will be lots to see when the plants open their doors for an inside look at the company. Registration is required, though, and employees must wear name tags and their regular badges, while visitors must wear tags.

The Family Day hours are from 9 a.m. to 3 p.m. During the day, only four gates will be open: Plant 1 Main Gate; Plant 2 Main Gate; Plant 3 Main Gate; and the Hazel Street gate. Once inside the company grounds, employees are required to park their cars in one of the lots and either walk to the different plant buildings or take one of the two shuttle buses that will be running continuously during the day.

While most of the buildings in the Bethpage area will be open, Plant 40 (the Grumman Data Systems building) will not be open.

For the safety and comfort of all employees and their families, the Family Day Committee requests that everyone pay heed to these rules of the day:

- Obey plant security guards when parking;
- Walk or use the bus to the plants;
- Enter the plants only at designated areas;
- Follow the marked aisles and do not wander;
- Wear low-heeled shoes for comfort and safety;
- Keep children away from equipment and machinery;
- Do not disturb articles or touch items in plants, offices or on desks;
- Do not smoke in any of the plants;
- Do not bring cameras inside the Grumman complex;
- Do not carry packages or food during the tour.
- Wear name tags and your Grumman badge;
- In emergency, contact the nearest security guard.

A final reminder: The Family Day Committee urges all employees and visitors to bring either the map in Plane News or the one in the registration packet for their convenience in getting to the different plants during the day.

24 big prizes slated for 1973 United Fund drawing

If you haven't made your contribution to the United Fund this year, you'd better do so if you want to be eligible for one of the big prizes in this year's company-sponsored drawing.

There are 24 prizes this year ranging from color TV sets to stereo consoles to home appliances.

Gus D'Errico, director of the Employee Services Offices, who is handling the arrangements for the drawing, says he things this is the best line-up of prizes he has seen in all the years since the company began sponsoring the drawing as an incentive to encourage employees to contribute to the Fund.

Two drawings

While the time and place will be announced later, D'Errico says there will actually be two drawings. It works like this: the names of all employees who contributed a "fair share" or full day's pay will be put in a barrel. The first place winner will have his or her choice of any of the 24 prizes on the list, the second place winner will select from the remaining 23 prizes and so on down the line until the first 12 names are drawn. Then, the names of all the other United Fund contributors will be added to the barrel and the remaining 12 winners will be drawn in the same manner as the first drawing.

"This way, the employees who make the biggest contributions to the Fund have more opportunity to win one of the bigger prizes," says D'Errico.

And the prizes this year are big. Here's the line-up:

- Magnavox 25" Color T.V. Combination.
- G.E. 24 c.f. Refrigerator with Ice Crusher and Ice Maker on door.
- Sylvania 25" Color Console T.V.
- Pioneer 120 Watt Amplifier with BSR Turntable and one pair Pioneer Superdynamic Speakers.
- G.E. Americana Range or Caloric Gas Range.
- G.E. 25" Color Console T.V.
- Sylvania 25" Color Console T.V.
- Westinghouse Duplex Refrigerator- Freezer.
- Sylvania Stereo Console AM-FM.
- Admiral 19" Color T.V. with Remote Control.
- Sylvania 18" Portable Color T.V.
- Pioneer 70 Watt Amplifier with BSR Tuner and one pair Creative Speakers.
- Frigidaire Skinny-Mini Washer-Dryer.
- Sony 15" Color T.V.
- G.E. 18 c.f. Frost-Free Refrigerator.
- Caloric 30" Gas Range.
- G.E. 16-pound Automatic Washer.

Stereo system

- Magnavox Stereo Sound System.
- G.E. Undercounter Dishwasher.
- G.E. Upright Freezer.
- Whirlpool Automatic Washer.
- G.E. 30" Electric Range.
- G.E. Port-a-color T.V.
- G.E. 23" Black and White T.V.

NASA visitor. On a recent visit to Bethpage, NASA headquarters director of Maintenance and Operations Jerry Gaffney (second from left) met with the company's Facilities Department representatives to discuss Grumman's first energy conservation contract. The $60,000 contract is to study methods of conserving energy in buildings at the space agency's Langley Research Center, Hampton, Va., and Lewis Research Center, Cleveland. Pictured with Gaffney are, left to right: Tom Cunniffe, director of facilities engineering; Gaffney; Tim Murphy, deputy director of facilities engineering; and John Mockovciak, manager of energy systems. (Photo by Harry Prodromindes)

Dayton group engages In lively contest For Air Force contracts

Dayton team. Gerry Kaufhold (L) and Chuck Spencer cover a wide area in systems and R&D while representing Grumman at Wright-Patterson AFB. Although they're based at Dayton, the two make frequent trips to Bethpage to exchange ideas and information on upcoming projects.

DAYTON, O. — Each weekday morning, starting about 8 o'clock, representatives of the major aerospace firms begin streaming through the gates of Wright-Patterson Air Force Base near here with a view toward making their companies a little healthier in the future. Their Rx for improved finances: helping to secure new contracts—or cement old ones — with the various systems program offices and technical laboratories located at the big research and development center.

There are about 300 reps of major firms listed in the Dayton area. In addition to those associated with such industrial giants as Rockwell International, General Electric, United Aircraft, and McDonnell Douglas — all prime Air Force contractors, there are many others who perform similar chores for much smaller manufacturers. Whether these representatives are situated in business suites, cluttered one-room offices, or tucked away in private homes, they all have one thing in common: they are engaged in a lively struggle for contracts. These contracts, which help provide the Air Force with the advanced weapons systems it needs to keep the nation prepared for the future, also provide individual companies with the production dollars necessary to assure continued employment, growth, and prosperity.

The ultimate, of course, would be a long-term Air Force production program which could run over a decade and bring billions of contract dollars to the lucky winner . . . and it's easy to see why such a plum is so attractive, and why it invites such fierce competition.

Gerry Kaufhold and Chuck Spencer, who represent Grumman Aerospace at Wright-Patterson, probably run harder than most out here because they have so much territory to cover. And as the years go by, the two men admit, the pace seems to quicken. The reason: aerospace bucks are tougher and tougher to come by, and the competition for upcoming contracts gets hotter and hotter.

The breadth and depth of the Air Force operation at Wright-Patterson is staggering. For example, the Aeronautical Systems Division, a segment of the Air Force Systems Command, manages development and acquisition of aeronautical systems and related support equipment, ranging from counterinsurgency and special air warfare hardware to tactical missile systems for all Air Force operational sites. That mission may seem simple enough, but when the full list of aircraft programs at Wright-Patterson is laid end-to-end—A-10, A-7, F-4, F-111, B-1, F-15, the new lightweight fighter, medium STOL transport, and remotely piloted vehicles — the scope of the funding and management effort gains in perspective.

Also situated at the facility just outside of Dayton are four key laboratories of the Systems Command — aeropropulsion, materials, flight dynamics, and avionics. Scattered around the base are even more labs —aeronautical research and aerospace medicine are just two of them — and headquarters for the Air Force Logistics Command is situated at Wright-Patterson, too. Nearby, the Air Force Museum, which houses aircraft and missiles for those who visit the site, is growing year by year. All in all, Wright-Patterson is a tremendous facility, both in sheer size of its physical plant, and in the various talents of the 25,000 military and civilian personnel employed there.

From these activities flow billions and billions of defense dollars each year. Most of them, of course, are expended on on-going aircraft and development programs. But there are millions being expended to push back frontiers in scientific and technical areas, also.

After a late entry in the Dayton area —Grumman didn't staff a full office here until early 1964—the Company first showed signs of becoming a contender for Air Force dollars in '69 when it won $840,000 in contract awards. The next year that figure was increased to $950,000, and in '71 it jumped appreciably to $2.8 million. After a slump in 1972 — that year the money coming in to Bethpage dropped to $1.4 million, Grumman regained lost ground in '73 by winning approximately $3 million in contracts from Wright-Patterson. But there are many at Grumman—and they include Kaufhold and Spencer—who feel that we've only scratched the surface. So far, contracts won by Grumman have been in research and development areas—materials, plastics, manufacturing techniques. But the *really* big contracts, the ones that could go into hundreds of millions of dollars, flow out of the systems program offices . . . and so far, Grumman has had little success in that field. That could change, however.

Right now, Grumman and General Dynamics are locked in competition to modify the Air Force's F-111 into an electronic countermeasures aircraft — a type of aircraft which could give added protection to strike aircraft operating over heavily fortified radar-controlled defensive positions. The Air Force is now studying proposals from Grumman and GD on that project and is expected to announce a winner (or winners) within a month that will proceed with the Phase I design study. In that effort, Grumman or GD (or both) would work out in specific detail how the structural modification and ECM systems integration would be accomplished.

In Phase II, the winning contractor would produce the actual hardware—there would be two prototypes — to prove conclusively that the EF-111A was an effective electronic countermeasures system.

Following that, the Air Force might announce a go-ahead on the final phase, III, a long-range program in which 40 or more existing F-111s could be modified to become electronic countermeasures aircraft.

As you might imagine, the competition is intense—and nerves are a little frayed. But the potential— in excess of $200 million in modification contracts for the winner — could help soothe many a jangling headache.

Gerry Kaufhold is a systems specialist who holds degrees in aeronautical engineering from Cincinnatti and a master's in industrial engineering from Ohio State. Before joining Grumman in 1966, Gerry worked in development engineering and program and contract administration for Republic and Avco, a good measure of that time at Dayton.

Chuck Spencer is the specialist on research and development on the Grumman team at Dayton. Chuck is a graduate aeronautical engineer — his degree is from Catholic U.—and he has a master's in business from St. John's. Spencer, with Grumman since

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Delivery date. Capt. George (Mike) Daly checks off technical papers while accepting delivery at Wright-Patterson of Grumman's EF-111 proposal. Assisting Daly in the check-off are (L to R) George Thompson, deputy director of Customer Requirements, Chuck Spencer and Gerry Kaufhold.

Dayton group

(Continued from page 3)

1958, prepared for his present assignment at Dayton with stints in structures engineering and program management while at Bethpage.

Their experience dovetails nicely—one handles systems, the other R&D—and the variance in years provides a natural difference in perspective. And perspective, perhaps, is the most vital element. Their analysis of the various programs being initiated at Wright-Patterson—the dollars available for a program now and what it might develop into for the future, and the talent and capabilities available at Grumman to make a successful bid—is a key consideration in the Company decision to expend its own dollars in going after a contract.

Though their schedule is busy enough at Dayton—they usually huddle once a day and compare notes before heading out to Wright-Patterson—the two fly back to Bethpage periodically for updating on Grumman projects. Although they report to Tom Kane, director of Customer Requirements, their visits to Long Island are usually spent in an exchange of ideas and information at advanced aircraft proposal meetings or in research and development areas.

Their task doesn't stop there. The Dayton office can also expedite delivery of correspondence to Wright-Patterson and make personal contact to assure quick action. Kaufhold suggests delivering any materials to the office at 333 W. 1st St. in Dayton and it will be delivered several days before it could be received on base through normal mailing procedures. And the Dayton office is cleared through Secret—so classified material presents no problem.

If you're planning to make a trip to Wright-Patterson, why not check in at the Dayton office. It's suggested, too, that you call in advance (513-228-1175). The two Grumman reps know the Wright-Patterson scene intimately and, says Spencer, "We may be able to save visitors from Bethpage a lot of time and trouble when they come out here by heading them in the right direction the first time around."

Kaufhold, who has lived in the Dayton area since 1961, lives with his wife Joyce and four of their six children in Dayton, O. Spencer and his wife Carole, a former secretary at Grumman, have one child and reside in Englewood, O.

The name GRUMMAN isn't a familiar one to many Air Force people. Some come no closer to Grumman than viewing the corporate name on a huge billboard near the main gate of Wright-Patterson. That may change some day, and if it does, Kaufhold and Spencer hope to have a hand in it.

Tickets . . .

'Dr. J' is back on Long Island only this time he's wearing a N. Y. Nets uniform. GAA is offering a chance for you to see Julius Erving and the rest of the ABA team for discount prices at the Nassau Coliseum. Tickets are on sale at the GAA office in Plant 30; $6.50 tickets for $4.00, and student tickets for $3.00.

Discount tickets are available for the following games: Friday, Nov. 2 - Kentucky; Sunday, Dec. 2 - Carolina (pre-game: Grumman vs. LILCO); Friday, Jan. 11 - Indiana; Sunday, Feb. 3 - Ketucky (pre-game: Grumman vs. LILCO); Wednesday, Mar. 13 - Utah.

tickets . . .

GAA is also offering tickets for the Islanders games. Regular $6.00 tickets cost $5.00, and student prices are $3.00. Tickets are on sale for the following games at the GAA office: Saturday, Nov. 3 - Boston; Thursday, Dec. 6 - Montreal; Saturday, Jan. 26 - Boston; Saturday, Feb. 16 - Chicago; Saturday, Mar. 16 - Rangers.

. . . more tickets

The Employee Service Office is offering a treat for kids of all ages—the Ringling Brothers and Barnum & Bailey Circus is coming to the Nassau Coliseum. You can buy discount tickets from the ESO offices. Regular $7.00 tickets are on sale for $4.50; $6.00 tickets for $3.50.

Tickets are available for the following shows: Thursday, Nov. 8 - 2 p.m. and 7:30 p.m. shows; Monday, Nov. 12 - 7:30 p.m. show; Tuesday, Nov. 13 - 7:30 p.m. show; Wednesday, Nov. 14 - 2 p.m. and 7:30 p.m. shows; Thursday, Nov. 15 - 2 p.m. and 7:30 p.m. shows; Friday, Nov. 16 - 2 p.m. show.

Art-Photo Show

It's almost show time for the Annual GAA Art-Photo Show. Entries will be accepted on Monday, Tuesday and Wednesday, Oct. 29-31 from 12 noon to 1:30 p.m. and again from 4 - 6:30 p.m. in the Plant 28 auditorium. At Calverton, Katherine Eng, Ext. 629, will accept entries.

The display will be open to the public starting Thursday, Nov. 1, from 4 - 7 p.m. On Friday, Nov. 2, exhibit hours will be from 12 noon to 1:30 p.m. and 4 - 7 p.m., while on Saturday, Nov. 3, and Sunday, Nov. 4, the show will be open from 12 noon to 4 p.m.

Ernie Von Der Heyden — Sidney Hughes

SIDNEY HUGHES VISITS GRUMMAN; REMINISCES OVER HISTORIC "SHOT"

Sidney Hughes has been flying the world's airways for more than 15 years, but it wasn't until a few weeks ago that he touched down in the New York area to visit his old friends at Grumman.

For those who don't recall the name, Sidney Hughes was the first man in the U.S. to be "shot out of" the Martin-Baker ejection seat from ground level. In September, 1957, Grumman was under contract with the Navy to test the British-designed safety seat in a F9F-8T Cougar at Patuxent River, Md. Sidney Hughes, a Royal Air Force lieutenant at the time, was the man selected to be ejected from a Cougar racing down the runway for takeoff at 120 knots. The Martin-Baker seat tossed Hughes 100 feet in the air and he landed safely—but not softly—on the airstrip with the fully automated chutes.

The ejection seat test was a major step in aviation safety. Up to that time, almost two-thirds of all Navy crashes occurred at landing or take-off while low altitude ejections produced a 94 percent fatality among Navy pilots.

"It was the first and only time I ejected from the seat," Hughes reflected while visiting the flight preparation room in Plant 4.

Hughes remained in the RAF for two years after the test, then returned to civilian life as a pilot for British European Airways. For the past seven years, he has been flying for Laker Airways.

Hughes' friend, Ernie Von Der Heyden, was on hand to greet the former RAF lieutenant when he arrived in Bethpage. Von Der Heyden was the project pilot for the historic ejection seat test.

Founder Roy Grumman cited By Aerospace Hall of Fame

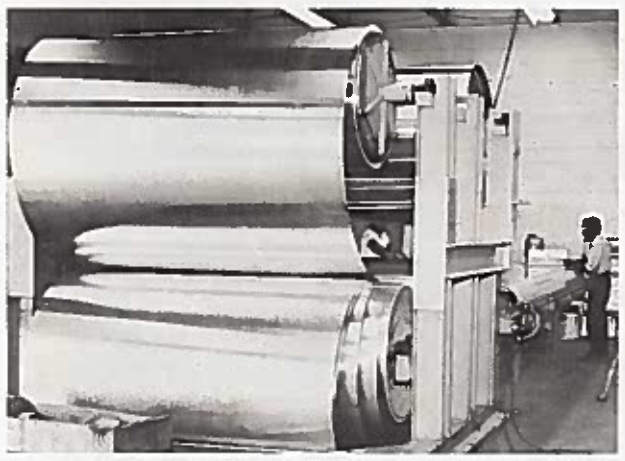
Roy Grumman, one of the founders of the Grumman Corporation in 1929, was invested into the International Aerospace Hall of Fame in San Diego, California, on October 13.

The Honorary Chairman of the Board was cited among his many qualifications for his career as an aeronautical engineer whose company designed and provided a great variety of tough, high-performance aircraft for the U. S. Navy before, during and after World War II. His wife accepted the award for Mr. Grumman who was unable to attend the ceremony.

Mr. Grumman has received numerous honors in the past, including the President's Medal of Merit and the Daniel Guggenheim Medal in 1948; the Frank M. Hawks Memorial Award in 1959; a citation from the National Aeronautics Association in 1966; the Hunsaker Medal of the National Academy of Sciences in 1968; enshrinement in the Long Island Hall of Fame and in the Aviation Hall of Fame in Dayton, Ohio, in 1972; and many others.

Two other pioneers in aviation were also honored at this year's ceremony: Marcel Dassault, French aeronautical engineer whose aviation products extend from the famed World War I SPAD to the contemporary Mirage fighter; and the late Admiral John H. Towers, U.S.N., pioneer U. S. naval aviator; and Commander of the U. S. Naval Air Force in the Pacific during World War II.

OLSON



Largest Allied facility is located at Sturgis

The real dazzler at Olson Bodies' Sturgis, Mich., facility actually lies in its own backyard. That's right. That's where the Grumman Allied subsidiary stores its chassis—which look like four-wheeled, open chariots with exposed engines, foot pedals and steering wheels—until they're ready to be outfitted with custom-tailored Olson aluminum truck bodies.

Neatly aligned in rows, hundreds of chassis are visible for almost as far as the eye can see. It's an impressive sight but one which represents only a few months work for the truck body manufacturer. Moreover, in sheer numbers alone, the chassis change almost daily as Olson keeps pace with industry's voracious appetite for delivery trucks.

It's a bustling operation at Sturgis. In the 10 years since its origin, Sturgis has grown in employment from 45 to the present number of more than 400. Annual production has risen from 400 trucks in 1963 to over 4,000, according to Vice President and General Manager Bill Snyder.

Olson's primary mission is the fabrication of truck bodies of aluminum for diverse markets, mostly in the Midwest. Today, it is Grumman Allied's largest manufacturing facility and the second largest manufacturing operation in Sturgis.

The Sturgis plant is only one of the Olson manufacturing facilities. The others are located at Athens, N. Y., Sherman, Tex., and Tulare, Calif. The firm also has 12 marketing offices, eight different body types, 337 different body sizes and 1,120 different options.

At Sturgis, the Olson plants are located on 33 acres off Route 66 on the outskirts of town. The three structures house 133,000 square feet of floor space and are designated for truck body assembly, machine shops and general offices.

Every Olson truck is built to a customer's exact specifications. The different styles are called Kurbmasters, Kurbmasters Jrs., Kurbvans and P-600s, and vary primarily according to the size of the vehicle. Special features such as racks, shelves and special lighting, are added according to customer specifications. In addition, the exterior decor may range from bare aluminum (which Olson covers with a clear protective coating to prevent oxidation), to a rich brown for United Parcel Service trucks, to a five or six color paint job with special name and logo decals. In addition, the Sturgis facility also installs refrigeration units in trucks.

Sales of Olson trucks is handled by J.B.E. Olson Corp., a Grumman Allied subsidiary headquartered in Garden City, L. I., with 12 branch sales offices. Twenty professional Olson "truckmen" are located around the U.S. to assist customers in developing the right sets of specifications so their trucks will efficiently meet their needs.

Photos by Bob Settles

service milestones

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Converse W. Sweetser, Struct. Analysis (35)
Merritt F. Potter, Plant Mgmt. (77)
Walter A. Eichin, Flight Operations (77)

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Andre Edmond, Inspect.-Tooling (2)
Frank V. Fusco. Mech. Struct. & Proto (5)
Lillian C. Schleicher, Grumman Corp.

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David J. Wagner, Parts Paint (2)
Eugene W. Fitting, Propulsion Test (2)
John E. Crawford, Tool Control (2)
Charles R. McAuliffe, Final Assemeb. Struct. (4)
George O. Granros, Static Test (5)
James M. Egan Jr., Electron. Repair (5)
Peter J. Obedzinski, Vehicle Tech. (5)
Joseph H. Boettjer, Elec. Prod. Support (5)
Hugo J. Sturm, Meas. Stds. Admin. Ops. (12)
George Ratushny, Major Assemb. (27)
Stanley C. Bohm, Program Mgmt. (34)
Stanis F. Coryell, Crew Systems (35)
Walter C. Cook, Est./Pricing (35)

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Arthur T. Fagan, Data Operations Center (1)
Bernice F. Rahm, Food Service (1)
William P. Walsleben, Q.C. Tech. Services (1)
Frank J. Kopyta, Jr., Hydraulics (2)
Jean E. Oakley, Machine Shop (2)
Nicholas A. Williams, Special Tools & Methods (2)
John M. Miller, Optical Tool & Metrology (2)
Richard M. Knoll, Technical Serv. (2)
William J. Gibney, P/S Verif. & Prod. Support (2)
William C. Hill, Spotweld (3)
Louis J. Mignone, Wing Sub-Assembly (3) (3)
Vincent Di Nardo, Q. C. Tech. Serv. (3)
Andrew A. Musgrave, Instrum. Syst. Design (4)
John Z. Tenke, Conventional Machines (5)
Vincent J. Priebe, Ops. Anal. & Plng. Research (5)
Guy C. Rowell, Jr., Timekeeping (6)
Michael Malanchuk, Structures (6)
Michael J. De Luca, Weapon Systems (7)
William D. Tuttle, Metal & Weld. Engg. (12)
Charles Wohlfarth, P/S Prov. Requiremts. (15)
John P. Bierschenk, Planning-Proposals (25)
John K. Stotz Jr., Corporate Systems (25)
Alexander Dove, Maintenance (27)
Walter C. Cleaver, Mach. Parts/Raw Materials (30)
Henry L. Jochum Jr., Q. C. Supplier Control (35)
John E. Doherty, Ind. Engg. (36)
Charles W. Mews, B/P Warehouses (37)
Joseph F. Eltman, Training & Develop. (39)
Richard A. Hilderman, Prol. Engg. Veh.-Tech. (73)
Frank Huttle, P/S A/C Syst. Serv. (80)
Robert Nafis, Grumman Data Systems

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John Gangi, Sub-Assembly (1)
John J. Gallagher Jr., Maintenance (1)
Joseph Mazzarella, Elect. & Fab. (5)
Walter H. Zirk, Static Test (5)
Harry F. Bodnar, Ops. Anal. & Plng. Research (5)
John J. Cummings, P/S Tech. Writing (6)
James M. Leather, Logistics (6)
Alfred F. Denton, Plastic-Plaster Tooling (11)
John R. Conturso, Receiving Inspect. (17)
Katherine Treska, Insurance-Records-Benefits (28)
Robert Tallman, Environ. Control Design (35)
John M. Campbell, Q. C. Supplier Control (35)
Fred H. Lieblein, P/S, A/C Sys. Serv. (94)

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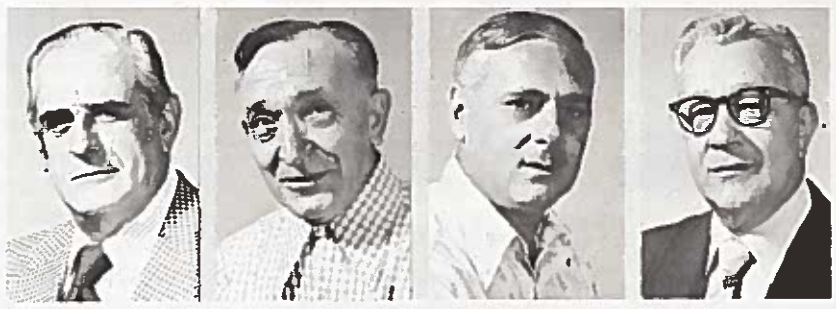
Eugene H. Capobianco, Planning (1)
John R. Krieg, Equip. Lines (1)
Julius Sokolow, Struct. Design (1)
Irwin Cohen, Syst. Reliab. & Safety (1)
Louis Polidora, Drop Hammer (2)
Richard Peterson Jr., Drop Hammer (2)
Louis P. Belanger, Maintenance (2)
Robert J. Shaw, Maintenance (2)
Edward Wisnewski, Conventional Mach. (3)
Edward J. Murray, Parts Paint (3)
Mario M. Gigliati, Fuselage Assemb. (3)
Edward A. Hazard, N/C Machines (3)

(Continued on page 8)

A. T. Fagan | B. F. Rahm | W. P. Walsleben | F. J. Kopyta Jr.

J. E. Oakley | N. A. Williams | J. M. Miller | R. M. Knoll



W. J. Gibney | W. C. Hill | L. J. Mignone | V. Di Nardo

A. A. Musgrave | J. Z. Tenke | V. J. Priebe | G. C. Rowell Jr.

M. Malanchuk | W. D. Tuttle | C. Wohlfarth | J. P. Bierschenk

J. K. Stotz Jr. | A. Dove | W. C. Cleaver | H. L. Jochum Jr.

For Sale

BIKES: Girl's 24 in. Sears, 5 spd., $30; Sears 24 in. girl's single spd., $10. 751-1256.

HONDA: '71, 350 hp, $475. 212-343-8046.

TIRES: (2) stud. snows, 1 w/rims, C78x14, 4 ply nylon, $30. 928-3154.

CADILLAC: '67 conv., new tp., start., new alt., tires, am/fm stero, full pwr., $1,050. WE 8-1930.

TRAILER: Utility, safety chains, 3x5 ft., lights, 670x15 tires, $75. 822-5581.

BOAT: '69 23 ft. Penn Yan avenger, tunnel drive, xtras, $4,500. AT 6-0308.

MISC.: '64 Volvo PV544, B18 eng., $125; (4) tires, 165 SR 13 radials, $12; 735x15 snow tire, (2) 600x5 w/w w/rims, $20; misc. Sprite-Midget parts, PY 8-4258.

POOL HEATER: Tropic, for in-grad., $350; concrete shower base, w/drain, $15. 589-7783.

MALIBU PARTS: 194 eng., '66, 55,000 mi., rebuilt trans., make offer. 694-4119.

TRIUMMPH: '66 TR4A, w/remov. hdtp., 4 new radials, $1,000. 775-0251 after 6 p.m.

GALAXIE: '69 conv., red, w/wht. int. tp., 301 eng., 8 cyl., 2 drs., 52,000 mi., 4 new tires, 2 snows, Blazer, '72 Chevy, h/r, snows, big eng., GE 7-6953.

CHEVELLE: '68 grn., 6 cyl., auto., p/s, 65,000 mi., $550. 796-8637 after 5 p.m.

BUICK: '65 Electra, wht., blk. tp., a/c, p/s, p/b, p/w, 4 dr. sedan, $400. MY 1-2636.

AUTO PARTS: Panasonic stereo tape deck, fm stereo pack, (4) Utah 6x9 spkrs., $125; M&H 11 in. slicks, 30.5 in. tall, XS-11 compound, mtd., pinned on Crager 7; in., s/s rims, $125. 538-8127.

VW: '61 $225. 884-0120.

OLDS: '67 Cutlass, v8, p/s, p/b, vinyl tp., 4 dr., new paint, tune-up, ball joints, 49,000 mi., very clean, $775. 587-5412.

TIRES: (2) new snows, G78x15, 4 ply poly, tubeless, load range B, $60; (2) snows 825x15 4 ply nylon, both with wheels, $30. 928-1437.

BOAT: '70 19 ft. Grady sht. outbd., 115 hp Johnson, '73 Holsclaw tandem trailer, outrigg., comp., twin 12 gal. tanks, full canvas, fully equipp., $3,600. 333-6761.

FLUTE: w/case, $30. LI 1-8709 after 5 p.m.

BUS: VW '71, 7 pass., new tires, 51,000 mi., $2,000 firm. 226-3644.

STA. WAGON: '68, 9 pass., a/c, p/b, p/s, tint., 72,000 mi., $950. 541-9288.

HOUSE: Huntington-Melville, 4 bedrm. colonial, sch. dist. 5; 1½ bath, liv. rm., din. rm., eat-in kitch., w/slate floor, den, patio, full bsmt., gar., fenced pvt., w/w, s/s, 2 zone ohw, appli., conv. to pkwys, upper $40s. 271-2330 after 4 p.m.

HONDA: '71 450cc, 8 in. over front end, cust. seat, cust. pipes, 1,750 mi., $875. 665-5723.

TIRES: (2) 670x15, 735x15, 775x15, 586-8558.

FURY: '68 2 dr. p/s, p/b, a/t, r/h, nds. work, $600. 884-4759 after 5:30 p.m.

PIANO: Upright, $100. 588-1920 after 6 p.m.

CALENDAR of events

Notice of events for the period Nov. 9 to Nov. 22, should reach the Plane News office by November 1.

Flying Club: Nov. 9, 5 p.m., Pl. 28, Election of officers, guests welcome. For info, call Betty Schiedorn, Ext. 7372.

Rod & Gun Club: Nov. 7, 7:30 p.m., Plt. 28, business meeting, guests welcome, J. Crawford, Ext. 2683.

American Society for Metals: Nov. 14, 8 p.m., King's Grant, Plainview, Long Island chapter, "Corrosion for the Layman", International Nickel Co. rep., guests welcome, Hall Silverman, X2181.

Coin Club: Every Wed., 12:10, Pl. 25 vendor conference rms., informal lunchtime meeting, Ken Hale, Ext. 1936.

Family Campers: Nov. 4, Pl. 28, Guard Hdqtrs. building, meeting, Herman Heinlein, Ext. 7903.

Amateur Radio Club: Nov. 21, 5 p.m., Radio shack on rof of Pl. 5, business meeting, guests welcome, E. Goodman, X871125.

Ex-Serviceman's Club: Vets counselor avail., alt. Thurs., Pl. 2, x2814. For info, call Al Kordula, Ext. 87259.

Soccer Club: Oct. 28, vs. Freeport, Eisenhower Park; Nov. 4, vs. Massapequa, at Grumman Pl. 3 field, all spectators welcome. Call Otto Stanaitis, X1381.

For Sale

HAM EQUIP.: 6M Gonset comm 111, crystals, preamp, $125; Globe king, 500w, am, cw, linear, $200. 667-2330.

TIRES: (4) H78x15, 20,000 mi., used only 600 mi., $75. 826-6272.

MONTE CARLO: '73 Landau, a/c, p/s, p/db, am/fm, radials, 432-1849.

BOAT: '63 Ulrichsen, 24 ft. sportfisherman, head, galley, $1,275. 724-1329.

BED: Colonial wht. twin, $30 or best offer. 265-7036.

HONDA: '69 450cc, overhd. cam, nds. front brk. clutch cbls., $550. E. Borgo, Ext. 87280.

MISC.: French prov. walnut stereo, am-fm, $175; 30 gal. fish tank, fully equip., $65. 822-1088.

BOAT: 12 ft. alum. car tp., semi-vee, wht., w/oars, $100. GE 3-4741.

T-BIRD: '55 partial, rebuilt, hdtp., soft tp., rebuilt eng., trans., $1,800. 751-5442.

CAMARO: '70 rally sport 307, 3 spd., console, r/h, w/w, 541-5854.

CAR RADIO: Am trans. from '63 Skylark. $10. 543-4316.

For Sale

PUPPIES: Mainiature Schanuazer, akc, ears-tail cropp., all shots, $150. 584-7285.

WASHER: Frigidaire 2 spd., $35. 751-1382 after 6 p.m.

HAM GEAR: Heath HW-12A, SSB rig., HP-23A power supply, Astatic D-104 mic, all w/manuals, $160. 423-5732.

HOUSE: Setauket, 3 bedrm., 2 bath, ranch, 1/3 acre lndscpd., eat-in kitch., laundry rm., beamed & panelled. din. rm., liv. rm., den w/firepl. custom deck off kitch., patio., 2½ gar,, xtras, $53,200. 751-6755 after 5 p.m.

MISC.: (4) wd. kitch. chrs. $15; umbrella-stand, $25; sofa-bed, $150; (2) sofa chrs., $50; Singer sew. mach., 285K, $35. 588-6364.

STA. WAGON: '72 Plymouth, sport suburban, fully loaded, $3,600. firm. 751-6078.

DATSUN: '72 240Z, 16,000 mi., fully equip., ask. $4,800. 483-3586.

DINETTE SET: Tbl. w/leaf, $20; chrs., all for $30. 581-1258.

ZENITH: 23 in. b&w TV console, $50. WA 1-1916 after 4:30 p.m.

VW: '69 conv., $650. 567-1843 days.

For Sale

TIRES: (2) F78x14 Firestone, Ford rims, $35; (1) 775x14 Sears Atlas, Ford rims, $10; (1) 825x14 snow tire. 698-5441.

MISC.: Sears, 46 in. snowblade, 12 hp, ready for hook-up, $30. CH 9-0943.

BOAT: 15 ft., 50 hp Mercury, 4 wheel trailer. LI 1-2886.

ETAGERE: Chrome, glass, 5 open shelves, $19. 212-379-0501 Mon.-Thurs. 10 to 5.

MOTORCYCLE: '73 Harley Davidson, 350cc, dirt scrambler, street bike, 1,800 mi., $900. WE 5-1115.

DIN. RM. TBL.: Ethan Allen classic manor, 42x60 opens 96 in., seats 12 to 14, pads, $275. 212-IN 1-2280.

TIRES: 700x13 Kelly Springfield, ply poly. cord, mtd. on dart rims, one season, $25; 650x13 Goodyear power cushion, mtd. on dart rim, $10. 271-7076.

BUICK: '65 Wildcat Skylark, p/s, p/b, buckets, new trans., new tune-up, $375. 265-7284 after 6 p.m.

SKIS: Fbgl. w/steel edges, Cubco bind., alum. poles, Rieker sealed-sole Aust. leather boots, size 7½ women's, Tyrol boot caddy, complete $69. 212-379-0501.

FURNITURE: Sectional, 2 pc. Danish mod., blue, $30; coffee tbl., $10; 826-7830.

HOUSE: Bethpage, mod. expanded cape, 7 rms., fin. basemt., 2 car gar., storage attic, modern eat-in kitch., appl., carpet., a/c, $44,000. 433-9849.

BOAT: 14 ft. fbgl., elec. start, 40 hp, trailer, 586-6881 evgs.

CLOCK: Ant. c.a. 190 chOimes on half hour, wall or tbl., 8 day. 842-7590.

MISC.: New colon. candel., $35; din. rm. tbl., two leafs, 52 in. server, china silverware units, contemp., $120. 751-9017.

BOAT: 20 ft. Owens, w/navy tp., $150; w/90 hp Evinrude, $600; w/tandem trail., $850. WE 1-6099.

PROPERTY: Shirley, 50x200, $4,000. 938-6140.

MISC.: Crib, chest, carriage, car seat, car bed, high chair, lamp, etc., all for $125. 581-6770.

OIL BURNER: Shell Pac, six yrs., blower fan/motor 1/3 hp for forced hot air heat, stack relay control, ask. $85. PE 5-9348.

YAMAHA: '72, 350cc, low mi., inc. access., ask. $685. 581-3101 after 5 p.m.

at your SERVICE

This is a free service to Grumman personnel for non-commercial advertisements, accepted on a first-come, first-served basis. Classified advertisements are carried in PLANE NEWS only on the basis that everyone replying to such advertising will receive fair and equal consideration regardless of their race, creed, color, sex, or national origin.
Type or print ad on form available at Employees Service and Engineering counters, and send via interplant mail to PLANE NEWS, Plant 5, Bethpage. List home phone (with area code if outside Nassau or Suffolk). Limit: one ad per person per issue. No item under $10, no firearms or ammunition.

BOAT: 16 ft. Larson, tri-hull, 60 hp Johnson '70, w/cox tilt trailer, full covers, bilge pump, $1,800. WE 1-8194.

MG: '71 Midget, 20,000 mi., $1,500. 221-0961.

BONNEVILLE: '70, fully equip., a/c, p/s, p/b, p/seats, elec. windws., 42,000 mi., $2,100. 681-8610.

BOAT TRAILER: '67 Alloy marine, for 17-20 ft., $75; snow tires, H78x14 on Chrysiyer rims, $50. ED 4-4703.

FISHING GEAR: Finnor 4/o reel, #3 spin reel, 7½ ft. rod, Browning 30 lb. class trolling rod, Alcedo micron reel/peel 113h, more. 271:1567.

PROJECTOR: 16 mm Graflex sound w/mike jack, prof. model, fi'ms free, $170. MO 7-5470.

FURNITURE: Oak tbl., shelves, lamps, wd. wash. mach., pool tbl., mexican earthware, 543-6947.

MISC.: Capt. tbl., 48 in. rd., w/leaves, 72 in., match. chrs., $125; match. man's chest, dbl. dress., $50; vanity/desk, $10; sm. chest, $15. 757-2046.

CATALINA: '67 new shecks, ball joints, batt., 4 new tires, ask. $500. 231-8733.

MISC.: A'l-wd. kitch. set, tbl., 4 chrs.; (2) liv. rm. chrs., 36x80 storm dr., w/frame, best offers. 785-2939 after 6 p.m.

SKIS: Head 360, 200 cm., no bind., used 2 seasons, $50. 543-0044, after 6 p.m.

DIN. RM.: Mod. din. rm. set, tbl., 4 chrs., lg. buffet, china closet, must sell, $125. 567-3579.

MISC.: (2) Safari collapse. bikes, yellow, orange, $40 ea.; (2) Polaroid cameras, Swingers, blk. & wht., $10 ea. 588-3951.

STA. WAGON: Ford, 289 eng., $400. FR 9-8463.

TEMPEST: '67 2 dr. 6 cyl. auto., p/s, $475. 928-3976.

STEREO PARTS: Harman Karden 30 watt, dual chann. amp., am/fm w/mult. tuner, Garrard changer, $60. 543-0044 after 6 p.m.

MISC.: Biltrite carr., $25; crib w/mattr., $20; car bed, high chair, $10; teeter totter, $10. 293-7828.

MISC.: Fr. prov. walnut stereo, am-fm, $175; 30 gal. fish tank, fully equip., $65. 822-1088.

MISC.: Honeywell, F-38 port, elec., air cleaner, '72. MO 9-0747.

T-BIRD: '63, p/s, p/b, r/h, paint, tires, $300 or best offer. 727-6736.

FORD: '70 Econoline 200, 8 cyl., low mi., auto. trans., r/h, roof rack, $1,825. 734-5149.

HOUSE: No. Belimore, 3 bedrm. att. gar., fin. basemt., corner plot. CA 1-2219.

CADILLAC: '71 coupe deville, fully equip., a/c, p/b, p/s, p/seats, am-fm radio, low mi., 676-7318 after 6 p.m.

SPITFIRE: '71 Triumph, red w/hdtp., conv., am/fm, $1,550. 822-9720 before 7:30 p.m.

AUSTIN AMERICAN: '70, 4 spd. am/fm, $650. 798-6444 after 6 p.m.

FURNACE: Gas hot air, 80,000 btu, dist., return ducts, wall reg., $100. 588-9257.

SPKRS.: Quality 8x10 stereo, $15 for two. JU 1-1066.

MISC.: Colonial, bunk beds, w/mattr., dresser, chest, combo-chest desk, maple, $95; baby's crib, padd. car seat, $15; 40 ft. sect. redwd. fencing, $20; studd. snow tire, 855c14 on rim for '68 Olds, Ponitac. 584-6693.

CARS: '65 Ponitac, 2 dr. ht. Cata'ina, $350; '67 Wildcat, 2 dr. hdtp. $350. MO 9-2892.

TV: 25 in. RCA color, mahog., $100. 868-0121 after 6 p.m.

TIRES: Sears snow, (2) 845x15, studs, mtd., Chrysler rims, $35. HA 1-0943.

DISHWASHER: Coppertone, GE, under counter, must sell., 212-229-7123 after 6 p.m.

MISC.: (2) stetam/hot water cast iron, radiators, 42 ft. of new 1 in. pipe, $25. L. Kasusa, Ext. 7511.

HOUSE: Smithtown, 5 yr. colonial, all apli., 4 or 5 bedrms., 2½ baths, panel., den, large, eat-in kitch., fin. basemt., wkshp., laundry area, alum. siding, s/s, att. gar., tool shed, low $50s. 724-7492.

MISC.: Picture tube, color, type Z1FKP22, round, never used, $40. 334-8457.

CO-OP: Jackson Heights, 4½ rms., 2 bedrms., 6th flr., monthly maintenance charge, $159, inc. gas and elec., 2 a/c, 3 blks. to subway, ask. $12,500. 212-898-8823 after 6 p.m.

CAR: '64 Dodge dart, stand. trans., new batt., brks., water pump, h.d., shocks, hd.d muffl., 271-7076.

SEWING MACH.: Port. Singer, w/case, $35. 293-8039.

HOUSE: Massapequa Park, 5 bedrm. splanch, 2½ baths, full basemt., oil/hot water heat, panel, playrm., full dormer, form. din., eat-in kitch. $45,-000. LI 1-6425.

SNOWBLOWER: Eska, 5hp, self starter, used one season, $150. 226-2256.

VW: '65, new clutch, rec. inspect., $350. 798-8827.

OBITUARIES

Plane News has received word that death has come to the Grumman personnel listed below. We extend sincere sympathy to relatives and friends.

GEORGE E. SCHELL JR. of Mechanical Inspection, Plant 27, died October 13 at the age of 58. He had been with the Company since 1948 and lived at 19 McKinley St., Islip Terrace.

HERBERT HOLTZER of Engineering, Pt. Mugu, died October 16 at the age of 37. He had been with the Company seven years and lived at 1827 Jose Ave., Camarillo, Calif.

plane GRUMMAN news

Published twice a month for the employees of Grumman Corporation, Bethpage, N. Y. 11714, as a function of the Public Affairs Dept., Vice President J. B. Rettaliata, director.

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Roth reflects on 5 years at Grumman

"In a couple of months," said Cdr. Jim Roth, "I should be eligible for my five-year pin." Although the words came with a hint of a grin, the Commander, who has served as Navy Representative-in-Charge at Calverton since February, 1969, might just as easily have claimed 10-year "service" status—at least with Grumman products. Roth was sipping a cup of coffee in his Plant 7 office, and though he had just returned from one Navy acceptance flight, he was still suited up because he was scheduled for another later that afternoon. He was recounting his more than 2,500 flight hours in the A-6 series aircraft, and as he readily admits, that goes back aways.

It began more than 10 years ago. Using his log books to jog his memory, Jim recalled jumping into the right seat of the first Intruder ever delivered to the Fleet at the Naval Air Station, Oceana, Va. It was February 4, 1963. Piloting the Intruder was Jack Herman, then skipper of VA-42, the original training squadron for the A-6. (Herman is now working on Vice President Bob Miller's staff as assistant EA-6B program manager for Fleet introduction.) As soon as they landed, Roth switched to the pilot's position for his first turn at the controls at Oceana, and followed that up with another hop the next morning. Since that day the association has been going on, and on, and on.

Roth served with Oceana-based squadrons until 1967, helping as a flight instructor to train Navy and Marine pilots, some of whom established additional A-6 training squadrons at Whidbey Island and Cherry Point. An assignment as the original NATOPS model manager on the A-6, and a later tour as A-6 test and acceptance officer at the Naval Air Rework Facility at Norfolk did nothing to dim his interest in the Intruder.

It wasn't too surprising, considering his A-6 experience, that Roth was assigned in January '69 as Representative-in-Charge at Calverton, home of the Intruder.

During his time here, Jim has been flying the A-6A, A-6B, A-6C, A-6E, KA-6D, EA-6A, and EA-6B—which include the original Intruder and its many derivatives. More recently, he has added the F-14 to his acceptance flight list. Late last month while on a test hop in the EA-6B, Roth logged his 2,500th flight hour in the A-6 series.

United Fund short of goal

(Continued from page 1)

income. This year, employees can elect through payroll deduction a fair share contribution, a full day's pay or any type or size of contribution they may choose. We even hope to receive some cash contributions."

Also, for the first time, the company is calling on supervisors to assist in encouraging employees to contribute to the Fund. "We are asking supervisors to encourage their employees to contribute," says Knowles. "It is simply one more way of spreading the word that in this time of need, the United Fund needs all the support it can get. It is the first time Grumman has requested such an active participation on the part of supervisors, but we don't want to let the United Fund down this year."

Knowles has the support of all Grumman management in his effort. The company has had a very close relationship with the Fund for a number of years. In 1967 and 1968 Clint Towl served as the first chairman of the Fund's Board of Trustees. During the 1968 and 1969 campaigns, Towl was a member of the Executive Committee. Today Grumman Corporation President Jack Bierwirth is a member of the Fund's Executive Committee. In addition, this year Administrative Vice President John O'Brien is serving as industry chairman of the United Fund campaign for all of Long Island.

"Some of us think that although Grumman had a pretty good record last year, the support of the Fund has been concentrated too heavily on too few employees," O'Brien said at the September kickoff meeting. "We think we can turn this condition around. First, by increasing the number of employees participating through payroll deductions; and second, by encouraging employees who can't afford a fair share contribution to donate one or more day's pay through payroll deduction. We won't refuse a one-time cash contribution, either. However, we do want to stress the value of a day's pay through payroll deduction. If each employee would contribute a day's pay, we would collect about $1 million or more than twice the amount we collected last year."

The overall goal for the United Fund of Long Island this year is $3.1 million. All employees are urged to contribute whatever they can.

And if a direct thank you from Dan Knowles isn't enough, just ask the company's Fund chairman and maybe he can arrange a personal thanks from someone else in the company who also has a personal commitment to the United Fund.

milestones

(Continued from page 6)

John E. Connolly Jr., Prod. Control (4)
James W. Stapleton Jr., BPA (4)
Anthony T. Mascia, P/S Electro Mech. Des. Engg. (4)
Gerard A. Nardone, Drop Test (5)
Henry Hoch Jr., GSE Mechanical (5)
Robert J. Lecat, Adv. Aircraft Syst. (5)
Philip L. Barbaccia, Proj. Engg. (5)
Robert E. Papsco, Proj. Engg. Syst. Tech. (5)
Erwin S. McCalla, Admin. Ops. (5)
Louis P. Minerva, Resources (5)
Edward C. Ulrich, Prop. & Spec. Progs. (5)
Bartlam T. Whitehurst, Instr. Test (6)
James J. McCarthy, P/S Verif. & Prod. Support (6)
George H. Styles, Maintenance (6)
Joseph M. DeStefano, P/S Tech. Serv. (7)
Edward J. Campbell, Flt. Safety Support (7)
Charles T. Williamsen, Q. C. Lab. (10)
Frederick Bracher, Maintenance (1)2
Theodore A. Larson, Maintenance (12)
Robert J. Koegel, Structure (15)
Herbert Leung, Power Plant Design (15)
Frederick J. Bronleben Jr., Electro-Mech. Des. Proc. (15)
Alvin Winegard, Electro-Mech. Des. Proc. (15)
Albert A. Knight Jr., Central Receiving (24)
Walter W. Fedun, Drafting (25)
William Kirchberger, Proj. Plan. (25)
Catherine M. Jeransky, Corporate Security (28)
William T. Turnquist, Mach. Parts-Raw Material (30)
Wesley Hemsley, Mach. Parts-Raw Material (30)

J. E. Doherty

C. W. Mews

Aphrodite Vasilakos, Facilities Admin. (30)
Thomas E. Griffin, Air Breath. Prop. (34)
Louis Mitchell, Dynamics (35)
Gustave W. Hansmann, Structural Design (73)
Joseph T. Roth, Prod. Mgmt. Ops (77)
Thomas J. Doyle III, Program Mgmt. (77)
Glenn Hansford, Base Mgmt. (88)
Joseph E. Ahern, Production (88)
Roger B. Seybel, P/S Field Service (89)
George E. Devoe Jr., GDS

R. Nafis

J. F. Eltman

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